

DETAILED ACTION

In view of the appeal brief filed on 6/6/2011, PROSECUTION IS HEREBY REOPENED. A non-final rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

I. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- A. **Claims 1, 2, 4-7, 9, 10, 11, 13-16, 18-20, 22-25, and 27 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Herzog et al.*, U.S. Patent Publication No. 20020016840 [*“Herzog”*] in view of *Patel et al.*, U.S. Patent No. 6,865,185 [*“Patel”*].**

Claims 1, 10, and 19

As to claim 1, *Herzog* as modified by *Patel* discloses a computer-implemented method for providing differentiated quality of service in an application server, comprising:

a server system receiving a request for service from a client [*Herzog*, 0003, 0004: disclosing users generate packets for a video conference service | 0034-0036: the rule implies parsing packets for information (e.g., application, userid)] wherein said request includes an encoding specifying a current user role [*Herzog*, 0003: disclosing providing different quality of service based on network and transport header information | 0035: disclosing the packet identifies the user as a CEO] and a requested service [*Herzog*, 0035: disclosing the packet identifies a video service]; and

in response to receiving the request for service:

accessing pre-determined policy data [*Herzog*, 0033-0036];

establishing a quality of service context based on the specified current user role included in said request and said policy data [*Herzog*, 0036]; and

propagating said quality of service context with said request in the server system, wherein said propagating comprises sending data indicating the quality of service context with the request [*Patel*, column 3 «line 62» to column 4 «line 2»].

As noted above, while *Herzog* discloses establishing a quality of service context (i.e., high priority for specific packets), *Herzog* is silent as to propagating the quality of service context with said request. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Patel*.

Like *Herzog*, *Patel* is directed to provided differentiated quality of service contexts within a network. *Patel* further discloses incorporating a quality of service labels or tags (i.e., context) within each data packet to enable "enforcement of QoS treatments" [column 3 «lines 62-67»].

It would have been obvious to one of ordinary skill in the art to have implemented *Patel*'s feature of inserting the quality of service labels into each packet into *Herzog*'s differentiated quality of service system. *Patel*'s feature would enable *Herzog*'s system to enforce quality of service "in a highly scalable, flexible, and end-to-end network" [*Patel*, column 3 «lines 66-67»].

As to claims 10 and 19, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 1. Therefore claims 10 and 19 are rejected for at least the same reasons set forth for claim 1.

Claims 2, 11, and 20

As to claim 2, *Herzog* as modified by *Patel* discloses said information further indicates at least one of a user identity [*Patel*, Figure 1 | column 12 «lines 6-10»: each packet containing a flow identifier that indicates a user identity] or a time constraint. See rejection of claim 1 for reasons to combine *Herzog* and *Patel*.

As to claims 11 and 20, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 2. Therefore claims 11 and 20 are rejected for at least the same reasons set forth for claim 2.

Claims 4, 13, and 22

As to claim 4, *Herzog* as modified by *Patel* discloses said establishing a quality of service context is completed at an ingress point [*Herzog*, Fig. 1 «items 102, 104»: the server is an ingress point for the policy system].

As to claims 13 and 22, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 4. Therefore claims 13 and 22 are rejected for at least the same reasons set forth for claim 4.

Claims 5, 14, and 23

As to claim 5, *Herzog* as modified by *Patel* discloses said ingress point is at least one of a web server or a protocol manager service within said server system [*Herzog*, Fig. 1 «items 102, 104»].

As to claims 14 and 23, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 5. Therefore claims 14 and 23 are rejected for at least the same reasons set forth for claim 5.

Claims 6, 15, and 24

As to claim 6, *Herzog* as modified by *Patel* discloses propagating the same quality of service context with a subsequent sub-request of said request [*Patel*, column 3 «line 62» to column 4 «line 2»: disclosing that the quality of service tags are inserted in front of each data packet]. It would have been obvious to one of ordinary skill in the art to have modified *Herzog*'s

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quality of service system to include *Patel*'s feature as described above. One would have been motivated to include the same tag in subsequent requests to insure that the requests involved in the same session or transaction receive the QoS.

As to claims 15 and 24, they are merely directed to a system that performs the steps of the method of claim 6. Therefore claims 15 and 24 are rejected for at least the same reasons set forth for claim 6.

Claims 7, 16, and 25

As to claim 7, *Herzog* as modified by *Patel* discloses propagating includes inserting said quality of service context adjacent to at least one of a security and transaction context [*Patel*, Figure 3 «item 60»: inserting the labels in the header of the packet adjacent to transaction contexts]. See rejection of claim 1 for reasons to combine *Herzog* and *Patel*.

As to claims 16 and 25, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 7. Therefore claims 16 and 25 are rejected for at least the same reasons set forth for claim 7.

Claims 9, 18, and 27

As to claim 9, *Herzog* as modified by *Patel* discloses a request manager service dispatching said request including said quality of service context to a software component in a plurality of software components based on said quality of service context [*Patel*, Figure 3 «items 32, 36»: the flow manager dispatching packets to various virtual groups based on the QoS context].

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As to claims 18 and 27, they are merely directed to a computer-readable storage medium and system directed to performing the steps of the method of claim 9. Therefore claims 18 and 27 are rejected for at least the same reasons set forth for claim 9.

B. Claims 3, 12, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Herzog* in view of *Patel*, in further view of *Baughner et al.*, U.S. Patent No. 5694548 ["*Baughner*"].

As to claims 3, 12, and 21, *Herzog* as modified by *Patel* and *Baughner* discloses said quality of service context includes information indicating a service class [*Herzog*, 0036: "high" service class] and a deadline [*Baughner*, column 3 «lines 33-40»: deadline computed from qualify of service parameters (i.e., the parameters "indicate" a deadline)].

It would have been obvious to one of ordinary skill in the art to have modified *Patel* to include the deadline feature taught by *Baughner*. Such a modification is an example of using a known technique (including information indicating a deadline for executing a task) to improve similar systems (both *Patel* and *Baughner* are directed to QoS systems) in the same way (*Baughner* discloses that deadlines in requests are used to meet QoS demands). *See MPEP* §2143.

C. Claims 8, 17, and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Herzog* in view of *Patel*, in further view of *Colby et al.*, U.S. Patent No. 6006264 ["*Colby*"].

As to claim 8, while *Herzog* as modified by *Patel* discloses dispatching requests including a quality of service context, neither *Herzog* or *Patel* does not expressly disclose a load balancing service that dispatches the requests to an application server. However, such a feature was well known in the art at the time of Applicant's invention.

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For example, *Colby* discloses load balancing packets between different servers from a plurality of servers based on the QoS context implied by the content of the packet [*Colby*, Fig. 1c | abstract]. It would have been obvious to one of ordinary skill in the art to have modified *Herzog* to include *Colby*'s load balancing based on quality of service requirements feature. One would have been motivated to add such a feature into *Colby* to insure that packets are set to the "best-fit" server that can accommodate the packet request.

As to claims 17 and 26, they are merely directed to a system that performs the steps of the method of claim 8. Therefore claims 17 and 26 are rejected for at least the same reasons set forth for claim 8.

II. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452

/THU NGUYEN/
Supervisory Patent Examiner, Art Unit 2452